

Podcast: Getting from one generation to the next – the life and work of pioneering embryologist Dame Anne McLaren

Anne McLaren photo credit: The Gurdon Institute
Dame Anne McLaren. photo credit: The Gurdon Institute

Geneticist Dr. Kat Arney reflects on the life and work of [Dame Anne McLaren](#), one of the leading embryologists of the 20th century, whose work underpinned the development of the in vitro fertilization techniques responsible for bringing millions of ‘test tube babies’ into the world, and more besides.

Not bad for someone who ended up studying biology at Oxford University almost by accident. Apparently she picked the course because cramming for the zoology entrance exam seemed like an easier option than doing the required reading for English literature.

McLaren’s curiosity about early mammalian embryos was the fire that fueled a lifetime of research. Her groundbreaking work in the 1950s laid the foundations for *in-vitro* fertilization (IVF) babies, cloning and genetically engineered mice — technologies that have revolutionized human reproduction and biomedical research.

<https://geneticliteracyproject.org/wp-content/uploads/2020/05/311-One-generation-to-the-next-Anne-McLaren-Genetics-Unzipped.mp3>

In her later work, McLaren focused on what she called “the most fascinating and deeply mysterious cells of all” — the germ cells that will become eggs and sperm in an adult, which are specified just a few days after fertilization. She devoted the rest of her research career to pinning down the characteristics of these unique cells, trying to understand where they came from, where they were going, and what made them so special.

McLaren’s record outside the lab is almost as prolific as her scientific output. She was the first woman to serve as an officer of the prestigious (not to mention male dominated) Royal Society in its 300-plus years of history, taking on the job of foreign secretary from 1991 to 1996. This role in particular revealed one of her more unusual talents — the ability to evade jetlag.

She was also a role model and mentor to countless scientists, many of them women working hard to establish a career in a male-dominated world. McLaren occasionally complained about the “old boy’s network”, which she felt sometimes led to men only putting forward male friends for jobs. But she did note wryly that there seemed to be an “old women’s network” developing, at least in her field of developmental biology, which was helping to even up the balance.

As McLaren once wrote, “history may be circular, but the history of science is helical: it repeats itself, but each time at a deeper level”. Rather than the Newtonian idea of standing on the shoulders of giants, she saw scientists as forming a twisted helix through time, intertwining as we pass on skills, knowledge and friendship to those who come up behind us.

Anne McLaren’s influence on the world of reproductive science and medicine corkscrews deeply back in time, and legacy will stretch for years to come in the lives of those she knew, those who knew her work, and the many, many more who benefit from it.

This story was first published in the book [A Passion for Science: Stories of discovery and invention](#), which is packed with 20 stories about amazing women in science and is [available to download as an ebook for just £1.99](#).

Further information available online at GeneticsUnzipped.com

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